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09/669,178	09/25/2000	John R. Fredlund	81687RLO	3016

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EXAMINER

SELBY, GEVELL V

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 06/24/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/669,178

Applicant(s)

FREDLUND ET AL.

Examiner

Gevell Selby

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/26/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-23 have been considered but are moot in view of the new ground(s) of rejection.
2. The applicant's amendment to claim 10 overcomes the 35 U.S.C 112 rejection.

Drawings

3. The drawings were received on 3/26/04. These drawings are acceptable.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 4-10, 13-16, and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al., US 4,887,161, in view of Toyoda et al., US 4,420,773.**

In regard to claim 1, Watanabe et al., US 4,887,161, discloses a camera (see figure 2) having a removable image bearing medium for camera captured images that includes film or a digital memory comprising:

(a) a display (see figure 2, element 24) disposed relative to the removable image bearing medium (see figure 2, element 20) so that the display is removable from the camera with the removable image bearing medium(see column 3, lines

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42-44), such display responding to an applied power source ~~in the~~ for displaying images or information related to captured images and continuity to display such image after removal of the display from the camera and no power is applied from the camera (see column 5, lines 61-63 and column 7, lines 6-9);

[The power to the driver part of the display that changes the condition can be turned off and the display will continue to operate on the secondary solar battery which is a renewable power source that does not need to be conserved because of risk of running out.]

(b) means for actuating the display and applying the power source to provide images of one or more captured images or information related to such one or more captured images (see column 6, lines 1-9); and

(c) the display being positioned for viewing by a user (see figure 2 and column 2, lines 59-61).

The Watanabe reference does not disclose applying a power source from the camera to the display when the image bearing medium is in the camera.

The Toyoda reference discloses a camera with a removable storing unit 2 with a display device 201 that displays the number of frames that can be stored on the unit (see column 4, lines 17-23 and figure 2). The image pickup unit 1 has a power supply battery E1 and the storing unit has a secondary power supply E2 (see column 15, lines 55-60 and figures 15A and B). When the storing unit is separated from the camera it operates on its own battery supply, but when the storing unit is attached to the when, the storing unit is supplied with power from the battery E1 (see column 15, lines 60-66). In this way, the

consumption of the battery E2 having a small electric capacity can be minimized (see column 15, lines 66-68).

It would have been obvious to one of ordinary skilled in the art at the time of invention to have been motivated to modify Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, to have the camera's power supply power the display and other components of the storing medium when attached to the camera in order to minimize the consumption of the battery of the storing medium as taught by Toyoda.

In regard to claim 4, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 1. Watanabe et al., US 4,887,161, discloses that the image bearing medium includes a removable memory card (see figure 4, element 20) having the digital memory (see figure 1, 22).

In regard to claim 5, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 1. Watanabe et al., US 4,887,161, discloses that the image captured related information provides an indication of remaining capacity of images to be taken by the camera (see figure 1, element D1 and column 5, lines 28-30).

In regard to claim 6, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 1. Watanabe et al., US 4,887,161, discloses that the image captured related information provides a time or date (see figure 1, element D2 and column 5, lines 28-30).

In regard to claim 7, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 1. Watanabe et al., US 4,887,161, discloses that

the image bearing medium displays at least one indication of the status of the camera (see column 5, lines 52-67).

The display can be used as a viewfinder to indicate the image the camera will record in capture mode before the picture is taken.

In regard to claim 8, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 1. Watanabe et al., US 4,887,161, discloses that the image bearing medium communicates an indicia of the capabilities of the display to the camera (see column 6, lines 30-49 and figure 5, elements 23a and 23b).

In regard to claim 9, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 7. Watanabe et al., US 4,887,161, discloses that the camera actuates the display on the image bearing medium to remove camera status indications prior to removal of the image bearing medium from the camera (see column 5, lines 52-67 and column 8, lines 17-20).

When the display is in viewfinder mode displaying the current picture to be photographed and the medium is going to be removed from the camera, the camera will first change the image to the one with the smallest frame number removing the prior indication status.

In regard to claim 10, Watanabe et al., US 4,887,161, discloses a camera (see figure 2) having a removable image bearing medium for camera captured images that includes film or a digital memory comprising:

- (a) a display (see figure 2, element 24) disposed relative to the removable image bearing medium so that the display is removable from the camera with the

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removable image bearing medium (see figure 2, element 20), such display displaying images or information related to captured images (see column 3, lines 26-33), the display including material which is effective in a first condition in response to a selected applied high voltage applied to the camera for changing the condition of the material to display one or more images or information related to the captured images wherein such material continues to display the one or more images or information after the removal of the high voltage (see column 5, lines 61-63 and column 7, lines 6-9);

[The power to the driver part of the display that changes the condition can be turned off and the display will continue the operate on the secondary solar battery which is a renewable power source that does not need to be conserved because of risk of running out.]

(b) means for actuating the display by selectively applying high voltages to the material to provide one or more images of one or more captured images or information related to such one or more captured images (see column 6, lines 1-9); and

(c) the display being positioned for viewing by a user either when the display is in the camera or separate from the camera when no power from the camera is applied to the display (see figure 2 and column 2, lines 59-61).

The Watanabe reference does not disclose applying a power source from the camera to the display when the image bearing medium is in the camera.

The Toyoda reference discloses a camera with a removable storing unit 2 with a display device 201 that displays the number of frames that can be stored on the unit (see column 4, lines 17-23 and figure 2). The image pickup unit 1 has a power supply battery E1 and the storing unit has a secondary power supply E2 (see column 15, lines 55-60 and figures 15A and B). When the storing unit is separated from the camera it operates on its own battery supply, but when the storing unit is attached to the when, the storing unit is supplied with power from the battery E1 (see column 15, lines 60-66). In this way, the consumption of the battery E2 having a small electric capacity can be minimized (see column 15, lines 66-68).

It would have been obvious to one of ordinary skilled in the art at the time of invention to have been motivated to modify Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, to have the camera's power supply power the display and other components of the storing medium when attached to the camera in order to minimize the consumption of the battery of the storing medium as taught by Toyoda.

In regard to claim 13, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 10. Watanabe et al., US 4,887,161, discloses that the image bearing medium includes a removable memory (see figure 1, element 20) card having the digital memory (see figure 4, element 22).

In regard to claim 14, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 10. Watanabe et al., US 4,887,161, discloses that image captured related information provides an indication of remaining capacity of images to be taken by the camera (see figure 1, element D1 and column 5, lines 28-30).

In regard to claim 15, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 10. Watanabe et al., US 4,887,161, discloses that the image captured related information provides a time or date (see figure 1, element D2 and column 5, lines 28-30).

In regard to claim 16, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 10. Watanabe et al., US 4,887,161, discloses that the image bearing medium displays at least one indication of the status of the camera (see column 5, lines 52-67).

The display can be used as a viewfinder to indicate the image the camera will record in capture mode before the picture is taken.

In regard to claim 18, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 10. Watanabe et al., US 4,887,161, discloses a display type indicia disposed relative to the image bearing medium and wherein the actuating means includes means for reading such indicia to indicate that the display is acceptable for presenting data by the camera (see column 4, lines 10-19 and column 4, line 65 to column 5, line 7).

The connection terminals of the memory card and the camera making an electrically connection to allow the two components to communicate and indicate to the camera the display can present data.

In regard to claim 19, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 10. Watanabe et al., US 4,887,161, discloses

that the image bearing medium communicates an indicia of the capabilities of the display to the camera (see column 6, lines 30-49 and figure 5, elements 23a and 23b).

In regard to claim 20, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 10. Watanabe et al., US 4,887,161, discloses that the camera actuates the display on the image bearing medium to remove camera status indications prior to removal of the image bearing medium (see column 5, lines 52-67 and column 8, lines 17-20).

When the display is in viewfinder mode displaying the current picture to be photographed and the medium is going to be removed from the camera, the camera will first change the image to the one with the smallest frame number removing the prior indication status.

In regard to claim 21, Watanabe et al., US 4,887,161, discloses a camera (see figure 2) having a removable image bearing medium for camera captured images that includes film or a digital memory comprising:

(a) a display (see figure 2, element 24) removably connected to the removable image bearing medium (see figure 2, element 20) so that the display is removable from the camera with the removable image bearing medium and the display is removable from the image bearing medium (see column 3, lines 42-44), no power from the camera being applied when the display is separate from the camera (see column 3, lines 38-41), such display displaying images or information related to captured images, whether in the camera or on the image bearing medium whether inside or outside the camera (see column 3, lines 26-33);

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(b) means for actuating the display to provide images of one or more captured images or information related to such one or more captured images (see column 6, lines 1-9), and

(c) the display being positioned for viewing by a user (see figure 2 and column 2, lines 59-61).

The Watanabe reference does not disclose applying a power source from the camera to the display when the image bearing medium is in the camera.

The Toyoda reference discloses a camera with a removable storing unit 2 with a display device 201 that displays the number of frames that can be stored on the unit (see column 4, lines 17-23 and figure 2). The image pickup unit 1 has a power supply battery E1 and the storing unit has a secondary power supply E2 (see column 15, lines 55-60 and figures 15A and B). When the storing unit is separated from the camera it operates on its own battery supply, but when the storing unit is attached to the when, the storing unit is supplied with power from the battery E1 (see column 15, lines 60-66). In this way, the consumption of the battery E2 having a small electric capacity can be minimized (see column 15, lines 66-68).

It would have been obvious to one of ordinary skilled in the art at the time of invention to have been motivated to modify Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, to have the camera's power supply power the display and other components of the storing medium when attached to the camera in order to minimize the consumption of the battery of the storing medium as taught by Toyoda.

In regard to claim 22, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 21. Watanabe et al., US 4,887,161, discloses including a battery (see figure 4, element 27) provided on the removable image bearing medium which provides power for the display when the image bearing medium is removed from the camera (see column 5, lines 60-63).

In regard to claim 23, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claim 21. Watanabe et al., US 4,887,161, discloses that the image bearing medium is film mounted in a film cartridge or a memory card (see figure 1 and column 3, lines 20-24).

6. Claims 2, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, as applied to claims 1 and 10 above, and further in view of Doane et al., US 5,695,682.

In regard to claims 2 and 11, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claims 1 and 10 with a liquid crystal display. The Watanabe reference and the Toyoda reference lack that the display is made of chiral nematic liquid crystal material.

Doane et al., US 5,695,682, teaches the chiral nematic the cells of a liquid crystal display can be excited to a position or color with an electric field and remain stable when the field is absent and then changes again when another field is applied (see column 2, lines 34-65).

It would have been obvious to a person skilled in the, art at the time of invention, to modify Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, and

further in view of Doane et al., US 5,695,682, to have a display made of chiral nematic liquid crystal material in order to have the display hold its state even when a field is not applied as taught by Doane et al., US 5,695,682, so the display will not be as dependent of the battery.

In regard to claim 17, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, and further in view of Doane et al., US 5,695,682, as explained above, discloses the camera of claim 10 wherein the actuating means applies pulses of high voltage to the display to cause it to be effective in the first condition and to remain in such condition until pulses of lower voltage are applied (see Doane: column 2, lines 34-65).

7. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, as applied to claims 1 and 10 above, and further in view of Gowda et al., US 6,628,333.

In regard to claims 3 and 12, Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, discloses the camera of claims 1 or 10. The Watanabe reference and the Toyoda reference lack that the image bearing medium is film and a film cartridge mountable in the camera and includes such film.

Gowda et al., US 6,628,333, discloses a camera with a removable image bearing medium and display (see figure 4b and column 3, lines 19-25). The image bearing medium is a printer that prints images on instant film (see figure 5a and column 3, lines 65-67).

It would have been obvious to a person skilled in the art, at the time of invention, to modify Watanabe et al., US 4,887,161 in view of Toyoda et al., US 4,420,773, and further in view of Gowda et al., US 6,628,333, to have a removable printer in order to print the images the camera captures on instant film as taught by Gowda et al., US 6,628,333.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,724,427 discloses a camera with a removable display.

US 6,411,282, and US 5,508,720 discloses an apparatus with a removable display.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 703-305-8623. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary, Ngoc-Yen Vu can be reached on 703-305-4946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gvs


NGOC-YEN VU
PRIMARY EXAMINER